

Effect of Online- Virtual Class and Internet Addiction in Medical Students during COVID-19 Pandemic

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Abstract: *Background:* Onset of COVID-19 pandemic shifted the real class learning to virtual-online class. Students are obliged to use internet for many purposes. *Objectives:* The study is aimed to find the effectiveness of online-virtual class and internet addiction in students. *Method:* This is a cross-sectional study done in 60 medical students. The internet addiction test, stressors, and perception on virtual-online class are documented through the e-mail online survey. *Results:* Some male (43.24%, n-37) and female (13.04%, n-23) students are in mild to moderate degree of internet addiction. Major stressors perceived are COVID-19 pandemic -78.33%, lack of teaching- resources (books, electricity and internet issues)-56%, and academic load-44%. They felt demotivation, rage, worthless, anxious, lack of concentration and sleep. They used recreational-activities, cognitive-rewarding and self motivation strategy to manage stress. Online-classes are better in time utilization, no fear in asking questions, offline reuse of lectures, and maintain the study consistent. However, lack of text books and library access led to eye straining and headache while reading e-books. The electricity cut-off, less interactive sessions, no eye-contact and personal space interrupted the flow of online-class. It is perceived as unreal due to lack of teachers kinesthetic explanations on online setup. *Conclusion:* The major stressors are COVID-19 pandemic, academic load, teaching materials and resources. The coercion to use internet made students to suffer from mild to moderate degree of internet addiction and stress. The online-virtual class is not felt effective as the real one that has to be improved in some possible practical aspects.

Keywords: Addiction, COVID-19, Internet, Learning, Medical, Online, Students, Virtual.

Introduction

Students are the learners who need the proper guidelines and facilitations for their study. The mode of teaching technique during the COVID-19 pandemic is shifted to virtual-online class from the real time class scenario. In the virtual-online class, students have to depend on the materials provided by the teachers, digital resources and other online videos, and e-books, etc. Both teachers and students explore and enhance the teaching and learning outside the four walls of the classroom [1] by depending on internet and digital resources. Teachers provide the home assignment to the students through the online meeting applications. They have to complete it on their own at home that may lack the proper supervision from the teachers.

In the real class time, the practical classes are taken simultaneously along with the theory classes and skills are practiced in the laboratory.

However, there is no feasibility to conduct practical classes through online in current pandemic situation. This might have created problems to students in understanding the theory contents during online class. They might be facing many problems/ challenges during the virtual-online class.

Some of them could be poor access to internet, slow internet speed, financial crisis to purchase internet data pack, attendance crisis, etc. Besides, they are also in tough period of COVID-19 pandemic that may trigger their stress. Due to stay at home, no outside engagement for relaxation and entertainment and for their online study, they might be using internet excessively for meeting above purpose. This may drive them to use internet for longer period of time and push them to suffer from internet addiction. The addiction will impede on their mental learning capacity

and behaviors. Therefore, this study aims to study the internet addiction level and types of stressors that are likely to hamper the medical students learning process at their home stay during COVID-19 pandemic. The other objective is to find the perception of students on effectiveness (merits, demerits, suggestions) of online-virtual class on their academic learning process.

Material and Methods

This was a cross-sectional descriptive qualitative study. This study was conducted in first and second year medical students after receiving ethical clearance from the Institute. Students were informed about the purpose of the study. They were assured about the confidentiality of the information and data was secured for the research purpose. The sample size of the study was 60.

Both male and female students were included in the study. Students with any other addiction or psychological disorders were excluded from the study. The demographic variables collected were age, sex, and place. Internet addiction level was tested using the standard questionnaire [2]. The purpose of internet use, maximum hours and expenses contributed in internet surfing were also documented. The perception of students on effectiveness of virtual-online class to their learning was documented with a self-designed questionnaire. The questionnaire were delivered to the students and requested to fill it and return back through the personal email address.

A. Internet addiction assessment

The questionnaire used for internet addiction test was Internet Addiction Test (IAT) scale [2]. This test consists of 20 items with different questions that have to be responded from 0 does not apply, 1 rarely, 2 occasionally, 3 frequently, 4 often, and 5 always (Likert scale). The total scores obtained from all 20 items were summed to get the internet addiction score. The score from 20–49 points were considered as an average online user, 50–79 points were considered to be experiencing occasional or frequent problems because of Internet and 80–100 points were considered to be at greater addiction level.

Few open ended questions were delivered to get the knowledge on their expenditure for internet surfing, time for maximum internet use in a day

(internet use/ hour/day), purpose of internet use and effect of internet on their learning capacity before the pandemic and during the pandemic situation.

B. Perception of students on virtual-online class

It consists of three sections. Section-1 describes about the perception of students on the shift of their teaching-learning style from real class to online-virtual class, Section-2 was designed to find the types of stressors, problems due to stress (sign and symptoms), management of stress and choosing the medical field made them to regret or not, and Section-3 was designed to draw the information on rules and regulations of online class, and examinations. The thematic analysis was done to analyze their responses.

Section-1: It included seven questions to draw the perception of students on the shift of their learning to virtual-online class from the real class scenario.

1. How do you take the virtual-online class? Is it a better alternative to attend during COVID-19 pandemic?
2. Mention the merits and demerits of virtual-online class as compared to real class scenario.
3. State the factors that are hampering you to attend the online class.
4. Are you facing difficulties in understanding the theory contents due to lack of practical classes and problem based learning (PBL)? (PBL is a small group activity facilitated by the mentor in a clinical case which is followed by the students seminar).
5. Which subject do you feel more difficult in understanding during online class? Rank it from high to low understanding/difficulty level.
6. Do you feel that you are getting more assignments during online class as compared to real class time? Are you able to complete your home assignment on time? If not, give reason?
7. Give your suggestions/feedback to improve the ongoing virtual-online class.

Section-2: This section was focused to find their stressors and methods adopted by them to manage their stress level at this pandemic situation. Few questions were listed below.

1. Are you experiencing stress due to COVID-19 pandemic? Yes/No
2. What sorts of problems are you facing that led you to perceive it as a stressful situation at this COVID-19 pandemic?
3. Mention any other stressor that is hampering your study and health.
4. If you have any of the following signs and symptoms, please tick mark in the provided box. Write any other clinical features experienced by you due to stress in the provided blank space. (Lack of sleep, unable to concentrate in the class, palpitations, anxiety, respiratory difficulties, nervousness, restlessness, anorexia, nausea, headache, vomiting, diarrhea, fainting, rage, worthless feeling)
5. How do you manage your stress level? Please mention the ways that you have adopted to cope up with your stress.
6. In this COVID-19 Pandemic, do you feel that choosing the medical field for your further study was not a good idea? Yes or No; Give reason.

Section-3: Third section was designed to find the perception of students on rules and regulations of the online-virtual class and examination that has to be followed even in the pandemic situation. Some of the questions were as follows:

1. Are you able to attend all the classes on the schedule time provided by the college administration?

2. Do you have any stress because you are unable to meet your attendance criteria during online-class? If yes, what dilemma do you have?
3. Are you stressed due to postponement of your practical examination?
4. What are the difficulties that you have experienced due to postponement of the practical examination?

After the collection of data, it was entered in the Excel sheet for its management. Data was expressed in frequency and percentage. Few data for open end questions were categorized and divided into theme-wise to get the better conclusive result.

Results

D) Internet assessment test:

Maximum students use smart phones, tablets and laptops for the access of internet. But they emphasized the use of smart phones as a convenient device as compared to laptop or other devices. About 68.33% (n=60) of students are average online users. Female has IAT score of 20 - 57. Male has IAT score of 16 - 68. Almost 43.24% of male and 13.04% of female students are suffering from mild to moderate degree of internet addiction Table 1.

None of them are in severe addiction level. Both of the parameters, time spent and expenditure on internet were increased during pandemic as compared to before pandemic in many students as shown in Table 2.

Internet Addiction Score	Male (n=37)		Female (n=23)	
	Number of students	Percentage	Number of students	Percentage
Average online users	21	56.75	20	86.95
Mild to Moderate addiction	16	43.24	3	13.04
Severe addiction	0	0	0	0

Variables		Before Pandemic		During Pandemic	
		Number of students	Percentage	Number of students	Percentage
Time spent on internet (hrs/day)	1-3hrs	30	50%	5	8.33%
	3 -5hrs	27	45%	43	71.66%
	6-8 hrs	3	5%	12	20%
Expenditure on Internet (Nepali Rupees/month)	No expenses/occasionally	6	10%	none	0
	Less than 500	20	33.33%	9	15%
	800-1000	23	38.33%	31	51.66%
	>1000-1500	11	18.33%	17	28.33%
	More than 1500	none	0	3	5%

II) Purpose of internet use and effect of internet on their learning capacity:

The majority of students uses internet for online class, searching learning materials, social media and watching recreational videos (listening/ watching music, movies, series etc.). Few students use internet for checking emails, attending webinars, watching COVID-19 updates and knowing about fitness method. Very few students use internet for watching trending videos (You tube sites), searching world happening places and sharpening their professional skills.

Almost all students felt beneficial to use internet for their learning purpose. However, few students had headache and eye straining while using e-books and searching learning contents in websites. Additionally, they mentioned that internet did not help them significantly in their learning capacity. They were forced to use e-books because they were in hurry to leave hostel for reaching home due to COVID-19 pandemic.

This made them to leave many books at hostel and they were unaware of the critical situation that they encounter in the future. Few students felt difficult to get proper books and due to no access to library made them to explore different e-books on the internet. However, they preferred text books (printed) rather than to go through e-books.

III) The responses given by the students for the section 2 questions are as follows:

a. Perception of students on the merits (Table 3) and demerits (Table 4) of their learning to virtual: online class as compared to the real class scenario. They attend class through Zoom app. The visually clear slides, less fear to ask questions, easy and cozy environment at home for attending class, no delay in the academic session and better utilization of time in the pandemic situation are the major merits perceived by the students during online class.

The major demerits perceived are electricity cut off, poor internet connections, lack of textbooks and reference books, eye straining, loss of money in purchasing data pack for internet, lack of kinesthetic learning and faster completion of the course Table 4.

b. *Factors hampering to attend the online class:* The majority of students mentioned that courses are in fast track speed and have less time to review the content. The other factors that hampered their attendance are like COVID-19 infection in family members, felt burden due to heavy study content, regular online class without a gap for the vacation made them tiresome, eye pain due to long time exposure to laptop screen while studying, and demotivation to study.

Table-3: Students response to merits of Virtual-online class as compared to real class, n=60

Merits	Number of students	Percentage
Visually clear slides	57	95%
Offline reuse of the online lecture as recorded in the form of audio and video	30	50%
Room for the active participation	20	33.33%
Less fear in asking questions	45	75%
Able to attend classes in easy and cozy environment at home	54	90%
Better utilization of time at this Pandemic	50	83.33%
Opening multiple windows and resizing them in the laptop, helped students to compare the contents of books with the lectures. So that they will highlight and prioritize the important points to study	13	21.67%
No delay in the academic session	55	91.66%
Habit of studying consistent	40	66.66%
Time saving (not getting up early and hurrying to reach the college for attending class)	23	38.33%

Table-4: Demerits of attending online- virtual class as compared to the real class scenario, n=60

Demerits	Number of Students	Percentage
Lack of books, depend on e-books and PDF	58	96.67
Unable to visit library for reference books	32	53.33
Eye straining	47	78.33
Headache	32	53.33
Electricity and internet issues	58	96.66
Lack of proper gestures (hand-body movement) by teachers as compared to real class- Kinesthetic learning	43	71.66
No problem based learning sessions	43	71.66
No access to practical class	33	55
Technical error breaks the flow of class and unable to concentrate	45	75
Faster completion of course	42	70
Feeling out of class-decrease the concentration on online class	21	35
Active participation/interaction is lost due to no direct eye contact with teachers	24	40
Large loss of money while purchasing internet data packs	32	53.33
Felt loss of discipline	11	18.33
Monotonous and lack of group activities	22	36.66
No social interaction with colleagues	32	53.33

c. *Difficulty in understanding the theory content due to lack of practical class and ranking the difficulty level of different subjects among students:* Some students felt need of practical classes for anatomy and pathology disciplines

to better understand the theory contents. Few students mentioned that they first build the theory knowledge before entering the practical classes. Therefore, for some time they do not feel the need of

practical classes and are also able to understand the subject matters. Some students mentioned that they are really missing the problem based learning sessions (group activities discussed in small groups on a clinical case followed by the seminar) that was effective in their learning process.

Majority of students ranked Biochemistry and Anatomy as their difficult subject to understand the study contents. Few students have placed Microbiology and Introduction to clinical medicine (ICM) as their most difficult subjects to study.

d. *Home assignment and its completion:* Almost all students (54/60) admitted that they are

receiving very less home assignment and were able to complete it on time.

e. *Suggestions/ feedback given by students to improve the virtual online class:* The major suggestions given by the maximum number of students are solving the internet issues, emphasized to have more interactive sessions than to rush for finishing the course and keeping frequent examination to test their academic performance, Table 5. Some students also mentioned to incorporate some possible practical classes that can be taken through the online set up.

Suggestions	Number of students
Need to increase more communication with students	55
Increase the online tests and its regulation/weekly-monthly evaluation	45
Increase the interaction with students at the end of online class with Multiple Choice Questions	58
Making proper orientation of online class to the students	22
Management of infrastructures for uninterrupted online class e.g. electricity power cut off and internet issues	59
To incorporate some possible practical classes that can be taken from online set up	33
Add frequent discussion classes	58
Giving opportunity to students to present in small topics by dividing them into groups-small seminars/webinars	43
Need of some days off- to revise the content	58
To decrease the speed of teaching content for more interaction with students and revision	48

IV) The result on section 2 questions regarding their stress and its sign and symptoms

Many students (47/60, 78.33%) experienced some sorts of stress due to COVID-19 pandemic. They faced different sorts of problems (stressors) during COVID-19 pandemic.

Some of them are like teaching and learning materials and resources (books, internet, electricity etc.)-56/60, academic load (heavy study content, lack of time to revise, etc)-44/60, No group activities (PBL, seminars, group discussions)-29/60, Lack of extracurricular activities-23/60, parental wish and disturbance by

family members while studying at home and demotivation-14/60. Some other stressors are like infection due to CORONA virus in the family members-5/60, no social interaction with the colleagues-22/60, social media related stress like publication of fake news on treatment of COVID-19, news on suicidal cases -11/60.

The sorts of difficulties (sign and symptoms) that are experienced by students due to stress were as lack of sleep (30), unable to concentrate (32), worthless feeling (12), demotivation (12), restlessness and headache (47), anxiety (12), nervousness (12), anorexia (7), irritation and rage (4).

V) Management of stress by students

Some of the strategies used are like plantation of crops, reading books/Novels, polishing the personal skills, playing video games, listening music, dancing, walking on terrace, staying in calm environment and doing meditation, spending time with family members, thought of drive to become a doctor and self motivation, developing positive thoughts and hopes about the discovery of vaccine against COVID-19, watching motivational videos movies and series, cooking food, taking few hours of sleep, doing Yoga and driving out in own vehicle.

Inspite of stress and demotivation, none of them mentioned that choosing medical field is a bad idea. Instead they felt that this pandemic made them to realize that choosing this field is a good idea and made them proud of it. Few students realized that country needs more medical professionals to combat this pandemic situation.

VI) The following responses are given by the students in section 3 questions

Many students mentioned that they are able to attend all the online classes on the schedule time. However, some students mentioned that they are in stressed situation due to continuous electricity power cut and poor internet connection. They were unable to meet the attendance criteria. They mentioned that university will address their problem in coming future and allow them to appear in the examination.

Some (20/60) students are stressed due to postponement of their practical examination. They mentioned that they are studying the course of next semester but have pressure on their mind regarding the postponement of their previous semester practical examination. They felt burden due to heavy content of two semesters to study together.

Discussion

The purpose of the study is to find the perception of first and second year medical students on the virtual-online class. And to screen the internet addiction in them on home stay during the COVID-19 pandemic. The study was also designed to receive their suggestions for the improvement of the ongoing virtual-online class. A standard internet addiction test and self

designed questionnaires were administered to 60 medical students. The data was collected for its thematic analysis and expressed in percentage. We found that 43.24 % of male and 13.04% of female are suffering from mild to moderate degree of internet addiction. Here, numbers of male students are highly influenced by the internet than the female students, which is similar to the other study [3].

Majority of students' purpose of internet use were for online class, searching learning materials, social media and for watching recreational videos (listening/watching music, movies, series etc.). Some uses internet for attending webinars and watching COVID-19 updates too. Due to less outdoor activities during pandemic and to attend online classes, students are forced to use the internet. This might have enforced them to use internet for longer period of time. Our data supports our findings, when we look through the time period of internet use before and during the pandemic.

Before the pandemic of COVID-19, very few about 5% of students engaged their maximum time (6-8 hours) to access the internet. However, this was raised by 20% during the pandemic. In addition to this, due to online class and insufficient study materials with students at home, about 71.66% of students started using internet for 3-5 hours in a daily basis. This indicates that needs for learning have also enforced them to use internet for longer period of time. Not only the time, their expenditure for internet was minimal before the pandemic but later it was raised to maximum cost in most of the student's cases.

All of us know that substance/drug abuse only leads to addiction but young generation who have fertile mind may get abused by excessive use of internet too. Students continuously need motivation to study. In this tough period of COVID-19 pandemic, they even need more concern, motivation and counseling to cope with the stress and addiction level.

Many students (56%) experienced stress due to lack of teaching materials and resources like electricity and internet issues. Nepal is a

second richest country in water resources. There is production of electricity but many citizens are not getting it when they need at utmost. The government is trying to cope with the pandemic situation but they have to be responsible to address their future generation problems too.

These discrepancies of government is always present and yet never solved. About 44% of students mentioned that they are stressed due to heavy academic load [4] similar to a study done in 2010 before the pandemic situation. Few students experienced stress due to fake news published by the social media regarding the recommendation of different forms of treatment available for COVID-19 viral infection and frustrating news about suicidal cases. In Nepal, it is reported that at least 20 people committed suicide every day during lockdown.

It is published that 2,218 people committed suicide during the lockdown period which was done to minimize the spread of COVID-19 [5]. Such news are likely to harm the young generation who have greater drive to do something better in their life. Therefore, students are the most vulnerable group; they need continuous monitoring, counseling and rapid remedial support whenever they need. Few students mentioned that they need extracurricular activities to manage their stress.

This part of learning is absent in virtual-online class. Additionally, we found students admitting presence of different signs and symptoms in them as worthless feeling, anxiety, nervousness, lack of sleep, loss of concentration, de-motivated and rage. These all signs and symptoms emphasize that they are facing many problems. This further indicates that students are in stressful situation and isolated from the usual environment due to lockdown-stay at home. They need an urgent counseling and proper management of their stress.

Students adopted many strategies to manage their stress. Some of them are plantation of crops, reading books/Novels, polishing their personal skills, walking on terrace, staying in calm environment and doing meditation, spending time with family members, thought of drive to become a doctor and self motivation, developing positive thoughts and hopes about the discovery of

vaccine against COVID-19, watching motivational videos, cooking food, taking few hours of sleep, doing yoga, driving out in the vehicle and acceptance to cope the stress. In a study, it is mentioned that recreational activities like reading, doing physical exercises are some of the stress coping strategy adopted by the medical students and interns.

The cognitive self-rewarding and motivating oneself is considered to be an active strategy to cope with the stress [6]. Active strategy has been adopted by some of the students in our study. They kept hope / positive thoughts for the development of COVID-19 vaccine, becoming a future doctor and watching motivational videos etc. Some students preferred watching movies and listening music to relieve their stress which is similar to a study done in first and second year medical students [7]. Some studies report that substance abuse, alcohol use and smoking are the coping strategies adopted by the students, which is not reported in our study [8-9].

Instead of all these stressors, almost all students felt beneficial to use internet for their learning purpose. Though, some students mentioned that they are suffering from headache and eye strain due to long period use of internet and e-books. Few of them admitted that internet did not help them to improve their learning capacity, significantly. Some students wanted to use the library and hard copies to study than going through the e-books. Regardless of stress and government discrepancies, students are keen to know the updates of COVID-19 and they felt proud to choose the medical field for their further study. This pandemic made them to realize that they have chosen the right field because the country needs more medical personnels to combat the pandemic.

The major merits felt by students while attending online-virtual classes are like no delay in the academic session, better utilization of time when there is a risk to go out at pandemic situation, able to attend classes in comfortable environment at home, less fear in asking questions to teachers due to virtual presence of teachers and able to read

visually clear slides with room for offline reuse of audio and video of the lectures. Besides, many students mentioned that virtual-online class helped them to maintain their habit of study consistent. Apart from attending online classes, they were also able to attend webinars from across the globe on various topics during their home stay.

The major demerits of online class are such as they do not have their hard print form of their textbooks which made them to depend mostly on e-books and PDF, due to continuous electricity cut-off and internet issues they were unable to attend the regular online classes on the scheduled time. They are suffering from eye straining and headache due to long time exposure to the screen of laptops while studying/searching in internet and during e-books reading due to no access to library reference books. They emphasized that they cannot feel the virtual class as a real one because they cannot visualize the proper gestures like hand-body movement of teachers (kinesthetic explanation done by the teachers in real class), lack of eye-contact, lack of personal space with the teachers and lack of problem based learning sessions and seminars.

They felt monotonous to study during virtual-online class. It is reported that online teaching is boring and unengaging due to lack of two way interactions [10]. There are reports that students possess visual, auditory, and kinesthetic forms of learning styles [11]. It is reported that the top three types of multiple intelligence of students for learning are existential, intrapersonal and kinesthetic [12].

This indicates that teachers have to notice the intelligence of each student and approach them accordingly to make them an efficient learner. Some students are good learners on group activities whereas some need personal space with teachers for clarification of their doubts. They were able to visit the teachers before the pandemic on department office or library.

In current situation, they were unable to visit the teachers personally. Such students have to be provided with an opportunity to clarify their learning doubts at the end of the virtual-online class. There is always a room for teachers to improve their teaching styles and skills. Taking

feedback from students regularly help teachers to sharpen their teaching skills. One of the studies suggests complementing the online class with feedback sessions through video chats and virtual meetings might help in development of personal relation with the students [10].

Students felt that course is going at a faster rate than their brain grasping power. Therefore, they stated for day- off and need of a week vacation for the revision of their course. Obviously, it seems providing a vacation to students may help them to enhance their learning capacity. Brain requires rest for consolidation of the memory [13] and concentration. Vacations may break their stress, anxiety, restlessness and irritations too. This may refresh their mind to attend the classes in a good cognitive form. The holidays for students should be announced by the college or by the university.

In the first and second year of study, students go through many disciplines like Anatomy, Biochemistry, Microbiology, Pathology, Pharmacology, Physiology, Community medicine, and Introduction to Clinical medicine (ICM). Majority of students ranked study contents of Biochemistry and Anatomy as a difficult subject to understand during the online class. Few students have also placed Microbiology and ICM as their most difficult subjects to study. This may be due to lack of practical classes that has to be conducted simultaneously with the theory classes in these disciplines. They need practical skills and have to practice them to better understand the subject matters.

Factors that hampered students to attend the online class regularly are like demotivation due to pandemic, corona infection in the family members, heavy study content, internet and electricity issues. Many students are able to attend the online classes on the allocated schedule time. However, some students are in a stressful situation due to continuous electricity power cut and poor internet connections as similar to the nursing students of Nepal in an another study [14]. Some of them are unable to meet the attendance criteria allocated by the University. They believe that

university will address their problem in the future and allow them to appear in the university examination. Some students are stressed due to postponement of their practical examination. They felt burden due to heavy study content of two semesters (previous and next) to study, vigorously. This might have also increased their stress level.

The major suggestions provided by the students to improve online- virtual classes are: to solve the internet issues, emphasized to have more interactive sessions than to rush for the completion of the course and to put frequent examinations either weekly or monthly basis. They also mentioned to incorporate some of the possible practical classes that can be taken through the online set up. Further, they mentioned to carry out some group activities among them to make classes interesting and to avoid monotonous listening of the lectures.

They suggested conducting webinars that should be provided to students on groups and let them present on small topics, study contents or on recent advances. This seems a good suggestion to maintain the group activities and interactions among students. There are many challenges that need to be improved and solved by the institute and the government on this pandemic situation. Nevertheless, by incorporating the suggestions to the practical challenges will improve the ongoing virtual-online class. Apart from it, college management and government need to solve the problems related to infrastructure and resources needed for the smooth operation of the online-virtual classes.

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Conclusion

It is concluded that students are facing lots of problem during COVID-19 pandemic while their stay at home. Among many types of stressors academic load, lack of learning resources and poor internet connections are the major sources of stressors felt by the students. Internet became their coercion to use for learning, social interaction, managing stress, attending university classes, and for recreational and entertainment purpose.

That could be due to no outdoor engagement at the COVID-19 pandemic. This forced them to spend their lots of money and time in internet surfing. Apart from this some of them are also suffering from mild- to moderate degree of internet addiction too. Therefore, proper guidelines and counseling is necessary to make students aware and alert about the dependence on internet that might hamper their mental health.

Timely management of online class and providing proper resources to students might decrease their stressors and stress. Electricity and internet issues are the major problems faced by our students. This has to be solved by the government for the smooth conduction of the online-virtual class. Further, the study also concludes that the real class is better as compared to virtual-online class in many aspects. There are many challenges to improve the medical education in this pandemic situation. When there is only the way (alternative) than it has to be made more logistic and practical approach to meet the current challenging situation.

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